



CNX GAS COMPANY, LLC

Location: Doddridge Co., WV
 Field: Doddridge
 Facility: OXFD-11 Pad

Slot: Slot E
 Well: OXFD-11E-HS
 Wellbore: OXFD-11E-HS PWB

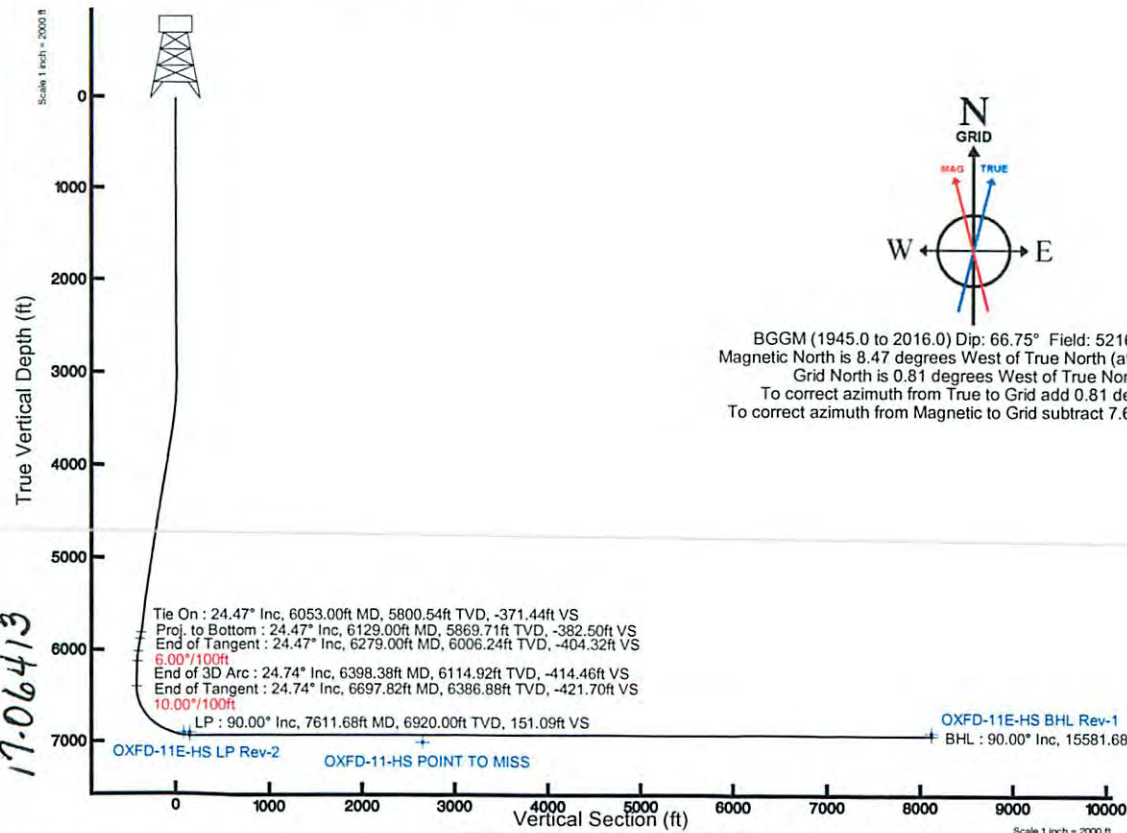
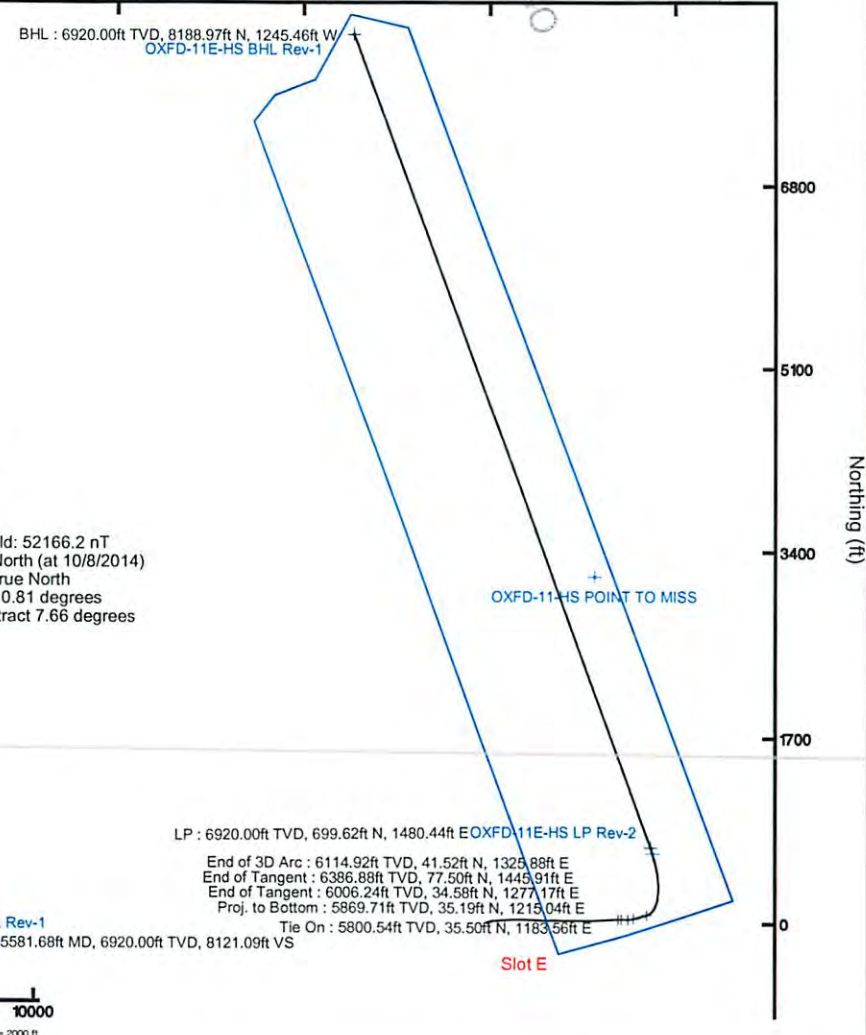
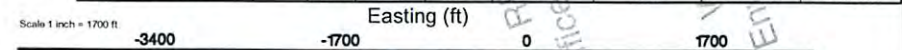


Grid System: NAD27 / Lambert West Virginia SP Northern Zone (4701) US feet
North Reference: Grid north
Scale: True distance
Coordinates are in feet referenced to Slot

Location Information					
Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
OXFD-11 Pad	1641688.000	246757.000	39°10'14.064"N	80°45'49.782"W	
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Longitude
Slot E	60.00	53.00	1641741.000	246817.000	39°10'14.664"N 80°45'49.120"W
Patterson 324 (RKB) to Mud line (At Slot: Slot E)	24.5ft				
Mean Sea Level to Mud line (At Slot: Slot E)	-1307.92ft				
Patterson 324 (RKB) to Mean Sea Level	1332.42ft				

Well Profile Data							
Design Comment	MD (ft)	Inc (")	Az (")	TVD (ft)	Local N (ft)	Local E (ft)	VS (ft)
Tie On	6053.00	24.470	90.560	5800.54	35.50	1183.56	-371.44
Proj. to Bottom	6129.00	24.470	90.560	5869.71	35.19	1215.04	-382.50
End of Tangent	6279.00	24.470	90.560	6006.24	34.58	1277.17	-404.32
End of 3D Arc	6398.38	24.738	73.314	6114.92	41.52	1325.88	-414.46
End of Tangent	6697.82	24.738	73.314	6386.88	77.50	1445.91	-421.70
LP	7611.68	90.000	340.000	6920.00	699.62	1480.44	151.09
BHL	15581.68	90.000	340.000	6920.00	8188.97	-1245.46	8121.00

Targets							
Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude
OXFD-11E-HS BHL Plat	6920.00	6188.97	-1245.46	1644095.58	265005.79	39°11'35.422"N	80°46'06.400"W
OXFD-11E-HS LP Plat	6920.00	643.02	1501.64	1643242.00	247460.00	39°10'21.227"N	80°45'30.177"W
OXFD-11E-HS LP Rev-1	6920.00	699.62	1480.44	1643221.40	247515.60	39°10'21.784"N	80°45'30.449"W
OXFD-11E-HS BHL Rev-1	15581.68	6920.00	8188.97	-1245.46	1644095.58	39°11'35.422"N	80°46'06.400"W
OXFD-11E-HS LP Rev-2	7611.68	6920.00	699.62	1480.44	1643221.40	39°10'21.784"N	80°45'30.449"W
OXFD-11E-HS POINT TO MISS	7000.00	3177.54	965.81	1642706.78	246994.45	39°10'46.202"N	80°45'37.424"W



Azimuth 340.00° with reference 0.00 N, 0.00 E

Scale 1 inch = 2000 ft

17.06413

ACTUAL WELLPATH REPORT (CSV version)

Prepared by Baker Hughes

Software System: WellArchitect® 4.0.1

REFERENCE WELLPATH IDENTIFICATION

Operator CNX GAS COMPANY, LLC
 Area Doddridge Co., WV
 Field Doddridge
 Facility OXFD-11 Pad
 Slot Slot E
 Well OXFD-11E-HS
 Wellbore OXFD-11E-HS AWB
 Wellpath OXFD-11E-HS AWP
 Sidetrack (none)

REPORT SETUP INFORMATION

Projection NAD27 / Lambert West Virginia SP, Northern Zone (4701), US feet
 North Refe Grid
 Scale 0.999972
 Convergen 0.81° West
 Software S WellArchitect® 4.0.1
 User Gendouw
 Report Ger 10/15/2014 at 4:09:49 PM
 DataBase/ WellArchitectDB/ev910.xml

WELLPATH	Local North [ft]	Local East [ft]	Easting [US ft]	Northing [US ft]	Latitude	Longitude
Slot Locatic	60	53	1641741	246817	39°10'14.6	80°45'49.120"W
Facility Ref			1641688	246757	39°10'14.0	80°45'49.782"W
Field Refer			1640277	240427.6	39°09'11.3	80°46'06.561"W

WELLPATH DATUM

Calculation Minimum curvature
 Horizontal Slot
 Vertical Re Patterson 324 (RKB)
 MD Refere Patterson 324 (RKB)
 Field Vertic Mean Sea Level
 Patterson ± 1332.42ft
 Patterson ± 1332.42ft
 Patterson ± 24.50ft
 Section Ori N 0.00, E 0.00 ft
 Section Azi 340.00°

WELLPATH DATA † = interpolated/extrapolated station

†	MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS ["/100ft]
	0	0	155.46	0	0	0	0	0
	24.5	0	155.46	24.5	0	0	0	0
	112	0.15	155.46	112	-0.11	-0.1	0.05	0.17
	212	0.26	148.8	212	-0.47	-0.42	0.22	0.11
	312	0.08	149.55	312	-0.76	-0.67	0.37	0.18
	412	0.18	188.58	412	-0.97	-0.89	0.38	0.13
	512	0.1	203.11	512	-1.17	-1.12	0.33	0.09
	612	0.06	302.22	612	-1.19	-1.18	0.25	0.12
	712	0.28	317.87	712	-0.92	-0.97	0.04	0.22
	812	0.37	315.39	812	-0.4	-0.55	-0.35	0.09
	912	0.45	336.19	911.99	0.28	0.03	-0.74	0.17
	1012	0.5	316.33	1011.99	1.08	0.71	-1.2	0.17
	1112	0.43	336.07	1111.99	1.85	1.37	-1.65	0.17
	1212	0.38	312.34	1211.98	2.52	1.93	-2.05	0.17
	1312	0.3	258.52	1311.98	2.85	2.11	-2.55	0.32
	1412	0.3	275.28	1411.98	3	2.08	-3.07	0.09
	1512	0.34	266.4	1511.98	3.2	2.08	-3.62	0.06
	1612	0.22	261.26	1611.98	3.32	2.04	-4.11	0.12
	1712	0.09	273.31	1711.98	3.39	2.01	-4.38	0.13
	1812	0.08	283.17	1811.98	3.46	2.03	-4.52	0.02
	1912	0.54	346.87	1911.98	3.96	2.51	-4.7	0.51
	2012	0.33	330.37	2011.97	4.71	3.21	-4.95	0.24

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2112	0.37	311.23	2111.97	5.28	3.68	-5.33	0.12
2212	0.4	306.62	2211.97	5.85	4.1	-5.86	0.04
2312	0.59	284.83	2311.97	6.44	4.44	-6.63	0.26
2412	0.7	285.79	2411.96	7.09	4.74	-7.72	0.11
2512	0.67	281.53	2511.95	7.75	5.02	-8.88	0.06
2612	0.56	279.72	2611.95	8.3	5.22	-9.93	0.11
2712	0.55	289.34	2711.94	8.85	5.46	-10.87	0.09
2787	0.77	296.22	2786.94	9.44	5.8	-11.66	0.31
2900	1.02	298.23	2899.92	10.74	6.61	-13.23	0.22
2932	1.03	318.05	2931.92	11.22	6.96	-13.67	1.1
2963	1.22	34.8	2962.91	11.67	7.44	-13.67	4.53
2995	3.37	67.17	2994.89	11.91	8.09	-12.61	7.59
3027	5.88	73.57	3026.78	11.85	8.91	-10.17	8
3058	8.34	76.26	3057.54	11.51	9.9	-6.46	8.01
3089	10.38	74.74	3088.13	11.03	11.17	-1.58	6.63
3121	11.72	73.29	3119.53	10.61	12.86	4.31	4.28
3152	13.11	73.95	3149.81	10.19	14.74	10.71	4.51
3184	14.72	74.44	3180.87	9.62	16.83	18.11	5.04
3216	16.25	76.24	3211.7	8.82	18.99	26.38	5.01
3247	17.43	78.83	3241.37	7.64	20.92	35.15	4.51
3279	18.85	81.72	3271.78	5.85	22.59	44.96	5.25
3310	20.63	83.01	3300.96	3.6	23.98	55.34	5.91
3341	22.43	84.53	3329.8	0.89	25.21	66.65	6.08
3373	24.08	84.88	3359.2	-2.32	26.37	79.23	5.17
3405	24.73	85.96	3388.34	-5.84	27.42	92.41	2.46
3499	24.55	86.14	3473.78	-16.67	30.12	131.51	0.21
3594	25.25	85.9	3559.95	-27.71	32.9	171.41	0.74
3688	25.38	89.51	3644.92	-39.93	34.51	211.55	1.65
3783	25.24	90.21	3730.81	-53.73	34.61	252.17	0.35
3878	24.47	89.5	3817.01	-67.29	34.7	292.09	0.87
3972	24.22	90.11	3902.65	-80.42	34.84	330.84	0.38
4067	24.74	92.7	3989.11	-94.79	33.86	370.19	1.26
4162	25	92.89	4075.3	-110.27	31.92	410.09	0.29
4256	24	92.84	4160.83	-125.42	29.97	449.03	1.06
4351	24.78	90.91	4247.36	-140.02	28.69	488.23	1.17
4445	24.55	90.58	4332.78	-153.92	28.18	527.45	0.29
4540	25.6	90.57	4418.83	-168.07	27.78	567.71	1.11
4635	25.22	91.73	4504.64	-182.77	26.96	608.47	0.66
4729	24.24	91.17	4590.02	-197.15	25.96	647.78	1.07
4824	23.33	90.48	4676.95	-210.78	25.41	686.09	1
4919	23.65	89.63	4764.07	-223.76	25.37	723.95	0.49
5013	23.22	89.78	4850.32	-236.37	25.57	761.33	0.46
5108	24.49	91.72	4937.2	-249.99	25.05	799.75	1.57
5203	23.81	91.74	5023.89	-264.38	23.87	838.59	0.72
5297	23.66	90.26	5109.94	-277.94	23.21	876.42	0.65
5392	23.8	89.29	5196.91	-290.87	23.36	914.65	0.44
5486	23.8	87.72	5282.91	-302.91	24.35	952.57	0.67
5581	24.68	87.48	5369.54	-314.7	25.99	991.54	0.93
5675	25.21	86.72	5454.77	-326.36	28	1031.13	0.66
5770	24.07	85.57	5541.12	-337.38	30.65	1070.64	1.5
5865	22.97	85.72	5628.22	-347.6	33.53	1108.45	1.37
5959	23.42	88.79	5714.63	-358.59	35.29	1145.41	1.35
6053	24.47	90.56	5800.54	-371.44	35.5	1183.56	1.4
6138	23.29	90.21	5878.26	-383.43	35.26	1217.97	1.9
6207	23.71	87.04	5941.54	-392.21	35.93	1245.47	3.08
6253	24.7	84.57	5983.5	-397.34	37.32	1264.27	1.42
6301	24.65	86.2	6027.11	-402.65	38.93	1284.24	4.32
6395	24.77	76.47	6112.54	-410.34	44.84	1322.96	3.86
6489	24.64	67.79	6197.97	-411.81	56.86	1360.26	2.04
6583	23.35	64.29	6283.85	-409.2	72.35	1395.19	1.7
6678	22.22	61.31	6371.43	-404.61	89.14	1427.91	4.81
6772	21.8	49.27	6458.63	-395.74	109.07	1456.75	6.84
6818	23.57	42.51	6501.07	-388.47	121.43	1469.44	10.32
6866	27.2	34.63	6544.45	-377.69	137.54	1482.16	9.31
6908	29.55	28.05	6581.41	-365.2	154.58	1492.49	6.9
6961	32.39	23.57	6626.85	-346.17	179.14	1504.32	6.6
7006	35.22	21.94	6664.24	-327.78	202.23	1513.99	7.47
7056	38.64	19.44	6704.21	-305	230.33	1524.57	11.87
7101	43.65	16.62	6738.08	-281.66	258.48	1533.7	

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7150	49.37	13.03	6771.8	-252.47	292.84	1542.74	12.82
7197	54.57	8.47	6800.75	-220.66	329.19	1549.59	13.44
7245	59.51	4.64	6826.87	-184.63	369.18	1554.14	12.27
7292	63.83	1.97	6849.17	-146.65	410.47	1556.51	10.46
7340	68.27	359.27	6868.65	-105.6	454.31	1556.97	10.58
7387	71.39	356.78	6884.86	-63.65	498.4	1555.44	8.29
7435	74.62	353.65	6898.89	-19.37	544.13	1551.6	9.17
7483	78.37	349.73	6910.1	26.32	590.29	1544.84	11.14
7530	79.89	346.53	6918.97	72.01	635.45	1535.35	7.43
7577	81.43	343.27	6926.6	118.21	680.22	1523.26	7.59
7626	85.63	340.95	6932.12	166.85	726.54	1508.31	9.78
7672	89.02	340.36	6934.26	212.79	769.89	1493.09	7.48
7720	89.08	339.13	6935.06	260.78	814.91	1476.47	2.57
7816	89.17	336.14	6936.53	356.68	903.67	1439.95	3.12
7910	89.69	334.06	6937.46	450.32	988.92	1400.38	2.28
8006	90.37	333.9	6937.41	545.79	1075.19	1358.27	0.73
8101	90.43	333.62	6936.75	640.23	1160.4	1316.27	0.3
8195	90.31	333.9	6936.14	733.67	1244.71	1274.71	0.32
8290	90.89	333.6	6935.15	828.1	1329.91	1232.69	0.69
8385	90.95	334.67	6933.62	922.59	1415.38	1191.25	1.13
8480	90.62	339.06	6932.32	1017.41	1502.71	1153.94	4.63
8575	90.58	341.39	6931.32	1112.4	1592.1	1121.8	2.45
8670	90.55	339.52	6930.39	1207.39	1681.61	1090.02	1.97
8764	90.49	342.86	6929.53	1301.35	1770.58	1059.72	3.55
8858	90.65	345.01	6928.6	1395.12	1860.9	1033.71	2.29
8954	90.8	345.27	6927.38	1490.73	1953.68	1009.09	0.31
9048	90.74	344.7	6926.12	1584.36	2044.46	984.74	0.61
9143	90.8	342.19	6924.84	1679.17	2135.51	957.68	2.64
9238	90.55	339.89	6923.72	1774.15	2225.34	926.82	2.44
9333	90.49	338.44	6922.86	1869.13	2314.12	893.03	1.53
9428	90.65	337.34	6921.92	1964.06	2402.13	857.28	1.17
9523	90.55	335.96	6920.92	2058.89	2489.34	819.63	1.46
9618	90.68	335.83	6919.9	2153.64	2576.05	780.83	0.19
9714	90.58	336.2	6918.85	2249.4	2663.76	741.81	0.4
9808	90.71	338.19	6917.79	2343.28	2750.4	705.38	2.12
9904	90.65	339.03	6916.65	2439.24	2839.78	670.37	0.88
9998	90.68	342.71	6915.56	2533.21	2928.57	639.57	3.91
10093	90.31	344.04	6914.74	2628.04	3019.59	612.39	1.45
10188	90.31	341.25	6914.22	2722.93	3110.26	584.06	2.94
10282	90.4	339.12	6913.64	2816.92	3198.68	552.19	2.27
10377	90.22	337.32	6913.13	2911.87	3286.9	516.95	1.9
10472	90.28	336.08	6912.71	3006.71	3374.15	479.37	1.31
10567	90.4	339.54	6912.15	3101.62	3462.1	443.5	3.64
10663	90.25	340.54	6911.6	3197.62	3552.33	410.73	1.05
10758	90.34	340.62	6911.11	3292.61	3641.92	379.14	0.13
10853	90.37	341.54	6910.53	3387.59	3731.79	348.34	0.97
10948	90.4	341.85	6909.89	3482.55	3821.98	318.5	0.33
11044	90.4	342.99	6909.22	3578.46	3913.49	289.51	1.19
11137	90.25	341.65	6908.69	3671.38	4002.09	261.27	1.45
11232	90.89	341.19	6907.74	3766.35	4092.14	231	0.83
11328	90.83	340.48	6906.3	3862.32	4182.81	199.49	0.74
11423	90.86	340.72	6904.9	3957.31	4272.4	167.93	0.25
11519	90.92	341.13	6903.41	4053.28	4363.12	136.56	0.43
11614	91.01	341.49	6901.81	4148.25	4453.1	106.13	0.39
11709	90.89	341.98	6900.24	4243.19	4543.3	76.36	0.53
11804	90.92	342.97	6898.74	4338.09	4633.88	47.75	1.04
11899	91.11	344.66	6897.05	4432.86	4725.09	21.28	1.79
11994	91.17	344.82	6895.16	4527.51	4816.73	-3.72	0.18
12090	91.08	344.19	6893.28	4623.2	4909.22	-29.36	0.66
12185	90.89	342.59	6891.64	4718.02	5000.24	-56.51	1.7
12280	90.92	340.5	6890.14	4812.96	5090.34	-86.58	2.2
12375	90.98	340.45	6888.57	4907.95	5179.86	-118.33	0.08
12470	90.58	337.16	6887.28	5002.9	5268.41	-152.67	3.49
12565	90.52	335.12	6886.36	5097.68	5355.29	-191.09	2.15
12660	90.4	334.76	6885.6	5192.31	5441.34	-231.33	0.4
12755	91.11	335.81	6884.35	5286.97	5527.63	-271.04	1.33
12850	91.51	337.58	6882.18	5381.79	5614.85	-308.62	1.91
12944	91.35	338.3	6879.83	5475.7	5701.94	-343.91	0.78
13038	91.23	341.66	6877.71	5569.66	5790.23	-376.08	3.58

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13135	91.26	343.34	6875.61	5666.54	5882.71	-405.24	1.73	
13230	91.26	343.11	6873.52	5761.37	5973.65	-432.65	0.24	
13325	91.2	340.41	6871.48	5856.29	6063.85	-462.38	2.84	
13420	91.17	338.59	6869.51	5951.26	6152.81	-495.64	1.92	
13514	91.17	340.27	6867.59	6045.24	6240.79	-528.66	1.79	
13608	91.26	343.13	6865.6	6139.16	6330.01	-558.16	3.04	
13703	91.23	344.33	6863.54	6233.94	6421.18	-584.77	1.26	
13798	91.29	344.85	6861.45	6328.61	6512.74	-610.01	0.55	
13892	90.86	343.18	6859.68	6422.36	6603.09	-635.89	1.83	
13987	90.74	340.54	6858.36	6517.29	6693.35	-665.46	2.78	
14082	90.95	340.6	6856.96	6612.28	6782.93	-697.06	0.23	
14176	90.8	340.14	6855.52	6706.26	6871.46	-728.63	0.51	
14271	90.86	339.54	6854.14	6801.25	6960.63	-761.37	0.63	
14366	90.89	339.3	6852.69	6896.24	7049.55	-794.76	0.25	
14461	90.8	337.25	6851.29	6991.18	7137.79	-829.92	2.16	
14556	91.2	337.55	6849.63	7086.07	7225.48	-866.42	0.53	
14651	91.17	337.56	6847.67	7180.96	7313.27	-902.69	0.03	
14746	91.42	337.61	6845.52	7275.85	7401.07	-938.9	0.27	
14840	91.47	336.71	6843.15	7369.7	7487.67	-975.38	0.96	
14935	92.71	338.6	6839.69	7464.56	7575.47	-1011.47	2.38	
15030	91.72	339.28	6836.02	7559.47	7664.06	-1045.58	1.26	
15124	91.72	341.55	6833.19	7653.42	7752.57	-1077.07	2.41	
15219	91.69	341.15	6830.37	7748.35	7842.54	-1107.44	0.42	
15314	91.76	337.98	6827.51	7843.29	7931.51	-1140.59	3.34	
15409	91.73	337.54	6824.61	7938.17	8019.41	-1176.53	0.46	
15504	91.69	336.68	6821.78	8033.01	8106.89	-1213.46	0.91	
15567	91.63	335.75	6819.95	8095.84	8164.51	-1238.86	1.48	
proj bit	15592	91.63	335.75	6819.24	8120.77	8187.29	-1249.12	0

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape	Comment
OXFD-11E-HS BHL Plat		6890	8188.97	-1245.46	1640496	255005.7	39°11'35.4	80°46'06.4	point	
OXFD-11E-HS LP Plat		6890	643.02	1501.04	1643242	247460	39°10'21.2	80°45'30.1	point	
OXFD-11E-HS LP Rev-1		6890	699.62	1480.44	1643221	247516.6	39°10'21.7	80°45'30.4	point	
OXFD-11E-HS BHL Rev.		6920	8188.97	-1245.46	1640496	255005.7	39°11'35.4	80°46'06.4	point	
OXFD-11E-HS LP Rev-2		6920	699.62	1480.44	1643221	247516.6	39°10'21.7	80°45'30.4	point	
OXFD-11-HS POINT TO		7000	3177.54	965.81	1642707	249994.5	39°10'46.2	80°45'37.4	point	

WELLPATH COMPOSITION Ref Wellbore: OXFD-11E-HS AWB Ref Wellpath: OXFD-11E-HS AWP

Log Name/	Start MD [ft]	End MD [ft]	Pos Unc	Model
01_Gyro (1	24.5	2787	Generic gyro - northseeking (Standard)	
02_Weather	2787	6053	ISCWSA MWD, Rev. 2 (Standard)	
03_BHI AT	6053	15567	NaviTrak (AT Curve Short Spaced)	
Projection	15567	15592	Blind Drilling (std)	

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